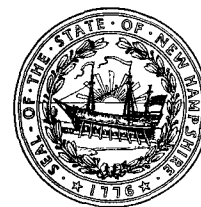




The State of New Hampshire  
**Department of Environmental Services**



**Michael P. Nolin**  
Commissioner

March 30, 2006  
**Letter of Deficiency**  
DSP#06-011

Mr. John Hunt  
165 Sunrise Road  
Rindge, NH 03461

RE: Damon Upper Reservoir Dam #203.02, Rindge

Dear Mr. Hunt:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 302.02, an inspection of the subject dam was conducted on December 17, 2004, October 14, 2005 and October 18, 2005. During the visual inspections and/or file review, the following deficiencies were observed:

1. There was leakage with a vortex observed at the low-level outlet on October 14, 2005, which was reportedly filled with gravel and large stone and is not operable. Water was also existing/leaking, at a significant rate, along the downstream stone face just below the observed vortex;
2. The left earth abutment/embankment of the dam had been previously overtopped with some soil erosion observed;
3. A significant amount of wood debris and large root systems were observed downstream of the left earth abutment/embankment;
4. The right earth embankment was breached previously. Fill was placed to within a foot of the top of the dike in the breached location. It was reported that a possible breach occurred at the dam as a significant quantity of debris was reported downstream. No clear breach was observed and the debris downstream may have been due to the significant flow. However, possible new angular stone was placed within the previously breached area recently;
5. Standing water was observed at the downstream toe of the right earth dike/embankment;
6. A review of the hydrology and hydraulics indicates that the dam is incapable, in its present configuration, of safely passing the 50-year storm event with one foot of freeboard; and
7. The operation and maintenance plan on file is dated 1998 and needs to be updated as necessary.

DES believes that the above deficiencies can be corrected by performing the following items on or prior to the indicated dates:

**May 1, 2006:**

1. Review the attached O&M plan and update as necessary;

Letter of Deficiency  
Dam #203.02/DSP#06-011  
March 30, 2006  
pg. 2

2. Provide evidence of a signed contract with an engineer registered in the State of New Hampshire to address the following deficiencies by December 1, 2006:
  - a. Replace the low-level outlet with a functioning outlet and repair the leaking at the downstream face of the existing structure;
  - b. Reconstruct the outlets (spillways) to safely pass the peak of the 24-hour, 50-year storm event with 1 foot of freeboard to the lowest point of the dam structure. The reconstruction proposal should not include overflow spillway structures constructed on fill, as currently exists at the right dike/spillway section;
  - c. Investigate and repair, if necessary, the standing water observed at the downstream toe of the right earth dike/embankment;

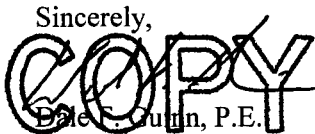
**August 1, 2006:**

3. Provide an application for a permit to reconstruct the dam with plans and specifications associated with the deficiencies in item 2 above. It should also be noted that a wetlands dredge and fill permit may also be necessary; and
4. Remove the debris from the downstream toe of the left earth abutment

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the previous page.

Sincerely,  
  
Dale C. Quinn, P.E.  
Dam Safety Engineer

Attachments Copy of O&M plan on file, DB13  
cc: Gretchen R. Hamel, Legal Unit Administrator ✓  
Town of Rindge  
Certified # 70001676 0000 0588 7063  
DFG/was/h:/safety/wendy/lod/203-02lod.doc